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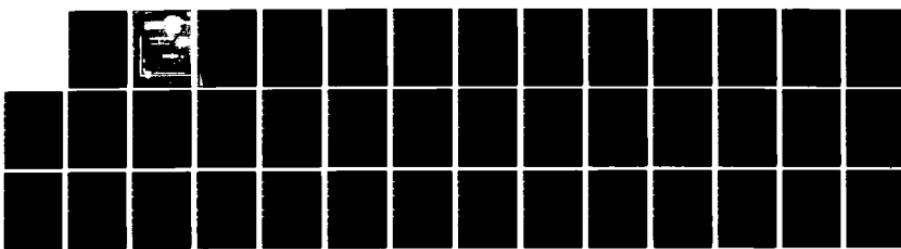
LOGISTIC PLANNING/ASSESSMENT CAPABILITY AT THE
DEPARTMENT OF THE ARMY LEVEL(U) ARMY WAR COLL CARLISLE
BARRACKS PA J A BOHM 22 MAY 86

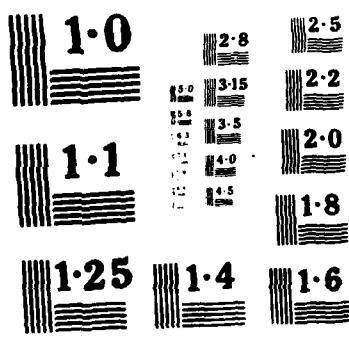
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of ongoing developments which may enhance the responsiveness of the current process. The incorporation of logistic considerations into the campaign simulation known as the Force Evaluation Model (FORECM) has the potential for providing much faster results. Another recent change, to a two year cycle for Omnibus, has opened up possibilities for providing additional excursions to determine the effects of changing parameters or planning factors. It also raises the issue of which force should be studied, the program force or the current force, in order to provide the most utility in conjunction with budget planning.

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US ARMY WAR COLLEGE
INDIVIDUAL STUDY PROJECT

LOGISTIC PLANNING/ASSESSMENT CAPABILITY
AT THE DEPARTMENT OF THE ARMY LEVEL

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LTC JOHN A. BOHM

22 May 1986

ABSTRACT

AUTHOR: John A. Bohm, LTC, OD

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The basic effort of this paper was to examine an existing planning capability(a computer simulation named Omnibus) used by the army staff for the purpose of exploring means of enhancing its utility and/or responsiveness. Data was gathered using a literature search and personal interviews. Specific effort was concentrated on a review of computer systems and models currently under development. The intent was to provide an outsider's viewpoint while looking for new relationships and/or means for making the current process more responsive. The research did not reveal any new relationships. It did confirm the existence of ongoing developments which may enhance the responsiveness of the current process. The incorporation of logistic considerations into the campaign simulation known as the Force Evaluation Model(Forcem) has the potential for providing much faster results. Another recent change, to a two year cycle for Omnibus, has opened up possibilities for providing additional excursions to determine the effects of changing parameters or planning factors. It also raises the issue of which force should be studied, the program force or the current force, in order to provide the most utility in conjunction with budget planning.

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CHAPTER I

INTRODUCTION

BACKGROUND

An integral part of the management process in any organization is the planning function. Planning provides the basis upon which allocation of resources is begun in order to reach an accepted objective. The attainment of that objective is then accomplished through a series of assessments and adjustments to an original plan. This process evolves into a cycle of repetitive iterations which may end, or begin itself anew upon a new foundation, with achievement of a particular objective.

This process is particularly applicable to the environment in which the US Army must operate. The system by which resources are obtained, ie: an annual budget allocation by the Congress, dictates an environment which causes the Army staff to deal with numerous iterations of several operating budgets concurrently. On a regular basis, activity is occurring which involves execution of an approved budget, preparation of a budget estimate, and preparation of guidance for planning in the years beyond the estimate.

Planning provides a systematic approach to organizing and

directing individual or organizational efforts toward achievement of a commonly accepted goal. It frequently provides the framework for the allocation of resources. The key to determining the resources needed to achieve the goal is knowing where you are at the beginning of the process. That is the purpose of the methodology that this paper will review. The means by which the US Army determines its current operational capability for war is a process using a computer simulation known as Omnibus. The thrust of this research effort is an examination of the Omnibus simulation and a search for means to enhance its effectiveness.

THE PROBLEM

Computer simulations provide a means of conducting assessments that can be very helpful to planners when they can achieve a key attribute-responsiveness. If an assessment can be accomplished within a timeframe which allows adjustments prior to success or failure in attainment of the objective, then it becomes very valuable. A limitation of Omnibus is that it takes so long to accomplish it can do only one approximation of current status based on one set of assumptions and planning factors. Thus, it does not enable the manipulation of factors to achieve optimization.

STATEMENT_OF_THE_PROBLEM

The logistics community, under the guidance of the Deputy Chief of Staff, Logistics(DCSLOG), is tasked annually to perform an assessment of the current force capability. This assessment has been labeled the Army Logistic Assessment(ALA). Although it is basically a manual process, a large source of relative information is derived from the computer simulation named Omnibus. Omnibus performs an operation plan related combat simulation as well as a comparison of the actual, resource-constrained force with its full, wartime designed capability (no shortfalls in personnel, training, or equipment). The Omnibus process requires 12 - 18 months for completion. It has normally been accomplished coincident with the budget execution year of the Army Planning, Programming, Budgeting and Execution System(PPBES). Therefore, the results are available in the approximate time frame that the budgeted force structure is actually achieved. Thus, it does provide the current force capability assessment that is needed as a benchmark. However, the process is so lengthy that the outputs are not available early enough to assist in preparation of the budget estimate for the coming year. Earlier results could substantially assist in establishing priorities for use in decision-making and justification of budget requests.

CHAPTER II

PURPOSE

The purpose of this research project is to review the Omnibus process and the current environment of related automated planning efforts. This review was accomplished with the intent of questioning current relationships and looking for new relationships that will make the process more effective and/or responsive.

The methodology used was a search of current literature and a series of visits to the primary agencies involved in the conduct of the process and the use of the results. Personal interviews were conducted face-to-face and by telephone.

The scope of this project was initially confined to the Omnibus effort primarily to concentrate on the logistic planning and assessment capability at the Army staff level. In the later stages, it became apparent that it was necessary to expand this viewpoint to address the relationship with the ALA and FPBES to understand the full importance of this simulation.

CHAPTER III

DESCRIPTION

The Omnibus process is designed to assess readiness and sustainability during theater-level conventional warfare. This is accomplished by a pre-conflict measurement of the equipment and training status of the force and a measure of the sustainability, following initiation of conflict. The transition of the force from mobilization through deployment into combat is assessed in a limited manner. The scenario reflects the Defense Guidance for the period being studied.

The methodology is illustrated at figure 1. This graphic portrayal of the analytical processes and computer-assisted models has been expanded to include the associated activities which comprise the totality of the logistic planning/assessment that results in the ALA. A more detailed description of the process can be found in the final report produced at the completion of each Omnibus study effort.

The study is begun at the direction of the DCSOPS via a

tasking letter which provides the initial guidance and outlines responsibilities of the major agencies. This guidance incorporates the current Defense Guidance(DG), and extracts pertinent information from a document known as the Annual Force Planning and Data Assumptions(AFFDA). Elements of this guidance have already been incorporated in the force and readiness data also provided by DCOPS. The planning factors provided are used in various models during the process.

The Omnibus force is then projected so as to reflect force structure at the end of the study year. Appropriate adjustments are made to equipment levels to include items such as Prepositioning Of Materiel Configured to Unit Sets(POMCUS). The force and the readiness data are input into the transportation model where they are used to simulate deployment of the forces to the appropriate theater. Unit Status Report(USR) data is used to compute earliest arrival dates for deployment, unit strengths, and equipment status factors. Calculation of travel times is performed using average carrier speeds and notional ports. Unit arrival times are calculated and input into the campaign simulation model.

The campaign simulation model being finalized for use in Omnibus is known as the Force Evaluation Model(FORCEM). This model simulates the theater level campaign for joint and multi-national operations and their associated logistics. The command and control function in FORCEM overlays three subordinate activities: combat, movement, and support. The combat function

models division level combat with aggregation at corps and army levels. The maneuver of forces is modeled in the movement activity. Support addresses both combat support and combat service support by modeling personnel, medical, engineer, supply, transportation, maintenance, and recovery activities. The outputs provided will reflect the status of the forces, resource expenditures, and Friendly Line Of Troops(FLOT) locations in combinations of printouts and graphic displays.

The description of the current system from this point becomes partially a matter of conjecture because ongoing implementation of FORCEM is modifying portions of the post-processing activity necessary to support its predecessor. One activity expected to remain is performed by Army Materiel Command. That activity is a comparison of the existing stocks of supplies to the expenditures and the remaining forces and equipment to determine a status at the end of the simulation.

The Deputy Chief of Staff, Personnel and the Office of the Surgeon General also perform some post-processing of the outputs. The majority of their use of the outputs of the simulation is to provide feeder data for some related models that perform specific functions for their offices.

Concepts Analysis Agency(CAA) also takes the outputs and uses them as inputs to another model known as the Force Analysis Simulation of Theater Administrative and Logistic Support (FASTALS). This model determines the doctrinal support base for the theater in terms of units and unit workload capabilities.

The workload capabilities are considered in light of unit arrival dates.

Logistics Evaluation Agency also reviews the data to analyze and validate the outputs with regard to the planning factors and allocation rules. The massive amounts of data are reviewed, validated, then provided to CAA for incorporation into the final report provided to the Army staff. The Deputy Chief of Staff, Logistics(DCSLOG) provides the final report to a panel of logistic experts who perform a detailed analysis. The analysis is performed using the matrix at figure 2. The panel report assigns ratings to each matrix element along with supporting rationale. This analysis, once approved by the DCSLOG, provides the basis for a briefing to the Chief of Staff, Army which is known as the ALA.

In addition to being briefed to the Chief of Staff, Army, the ALA; which analyzed, updated, and incorporated portions of the Omnibus results, is used to provide budgeting guidance by incorporation into Volume II of the Army Guidance(The Army Plan).

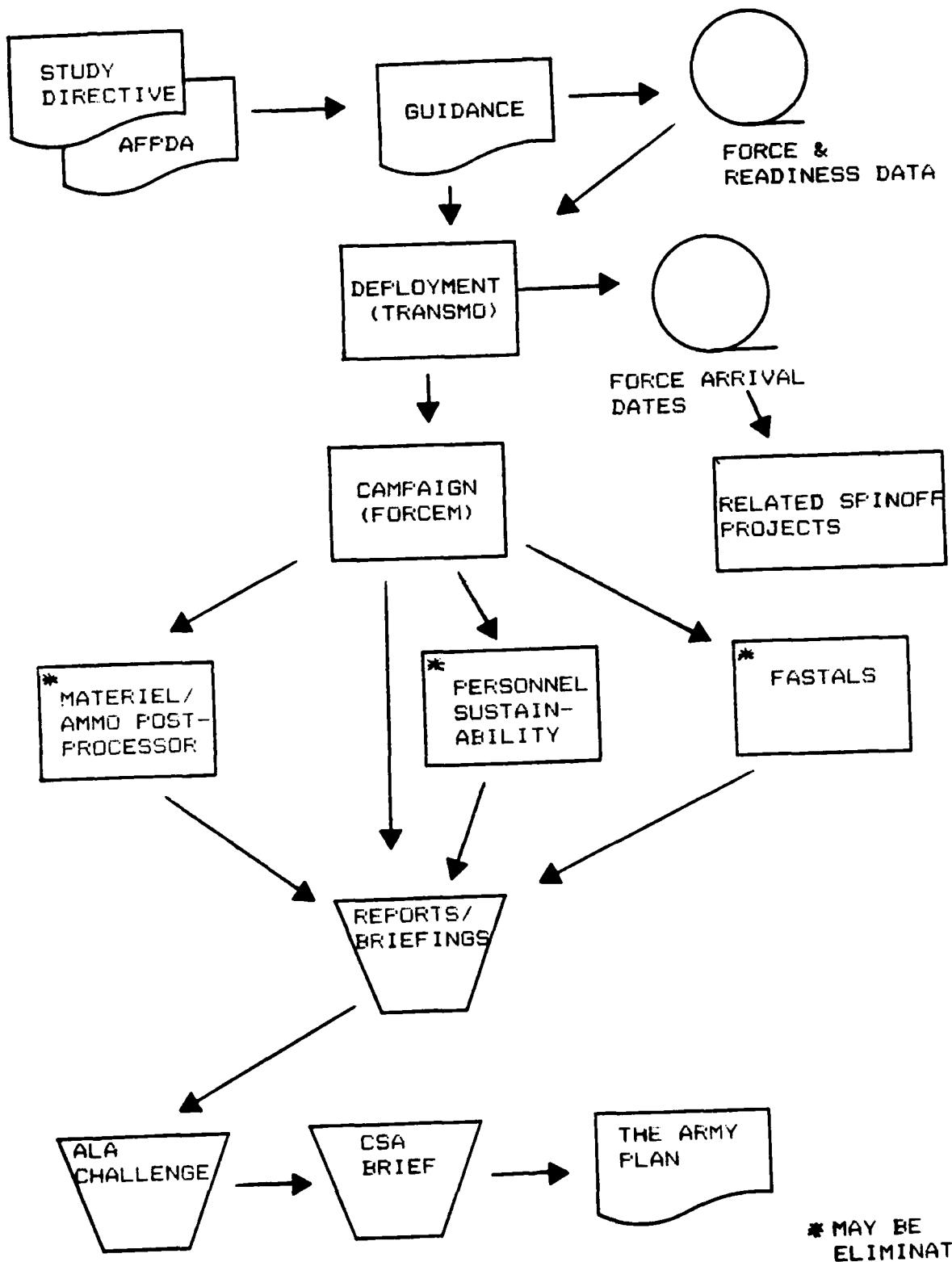
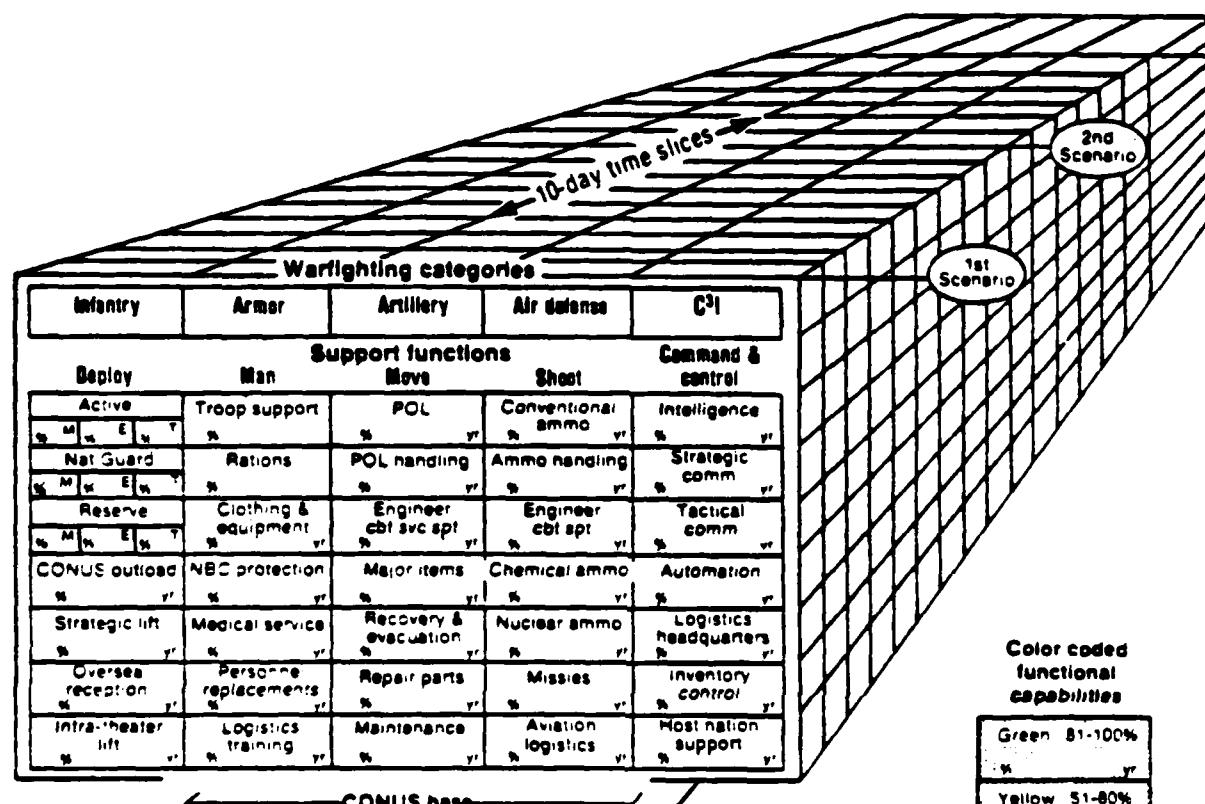


figure 1

* MAY BE
ELIMINATED/
MODIFIED BY
FORCEM

ALA Matrix



Color coded functional capabilities

| |
|---------------|
| Green 81-100% |
| Yellow 51-80% |
| Red 0-50% |
| Black 0% |

Percent capability for the 10-day time slice → **AMC** 75%

Calendar year capability expected to increase to 81% (green) based on Army program action

What was wrong?

Warfighter constraint

SCENARIO I: CRITICAL DEFICIENCIES IN AMC THAT WILL CONSTRAIN WARTIME OPERATIONS
SCENARIO II:

How did we propose to fix it?

ACTIONS & ORDERS

TODAY STEPS TO TAKE IF WAR BEGINS TODAY. (INNOVATIVE/EXPEDIENT MEASURES TO OVERCOME SPECIFIED DEFICIENCIES)

END FY ____ PROPOSED BUDGET ACTION TO ALLEVIATE MOST URGENT DEFICIENCIES

FY ____ TO ____ PROPOSED PROGRAM ACTION TO CORRECT DEFICIENCIES DURING POM PERIOD

What's being done?

What remains to be fixed?

RECAPITULATION OF CORRECTIVE ACTIONS CURRENTLY FUNDED AND ONGOING IN CURRENT FISCAL YEAR

RECAPITULATION OF ACTIONS FUNDED IN THE PROGRAM BUT NOT YET IN THE BUDGET AND ACTIONS FOR WHICH FUNDING IS TO BE INITIATED

figure 2

CHAPTER IV

CURRENT ISSUES

The Omnibus process is complex for a number of reasons. To make an assessment of this scope it is necessary to involve the Army Materiel Command, Logistics Evaluation Agency, the Army Staff, and numerous other activities across the Army. Hundreds of personnel are involved at various points throughout the process. For this reason, the number of issues, or problems with the process, may be significantly larger than these outlined here. However, many of these are administrative details. The following discussion will address only the issues considered to be major, and timely with regard to the current transitional status of the process.

Two major issues have emerged during the research for this paper. One deals with the use of the Omnibus process and the other deals with the process itself. The issue concerning the use of the process develops from the relationship between Omnibus and the Planning, Programming, Budget and Execution System

(PPBES). The area of concern is the year to be studied with respect to the PPBES. The major concern with the process is the need for greater automation of and linkage with some currently manual elements.

OMNIBUS/PPBES_RELATIONSHIP

The history behind the development of the Omnibus process is closely related to the Total Army Analysis(TAA) and its role in the PPBES. The TAA was developed to decide what we need in the future to accomplish the mission of the Army. Assumptions are made and conditions simulated to portray a future threat and the force needed to overcome that threat. The force that is developed in TAA then becomes the force that we build toward within the PPBES. This process becomes iterative as we update our data and continue to repeat the cycle. Around 1976, it became apparent that we were building toward future forces without a firm statement of our current capability as a baseline. Omnibus then came into being for the purpose of providing that baseline.

The magnitude of that task becomes apparent when you realize that an assessment must be made of the requirements and capabilities of an entire force structure as well as the ability of the wholesale base to sustain that force. The coordination of

information from many agencies is required to accomplish the assessment. A methodology incorporating manual and automated processes was developed to coordinate the massive amounts of data necessary. This methodology has taken 12 -18 months to process that data.

Because of the lengthy process, determination of the appropriate place to take the snapshot of current capability is important. The current practice is to project the force as of the end of budget execution year, e.g. the fiscal year 84 force structure capability is obtained at the end of fiscal year 84. The intent was then to incorporate judgments concerning that capability into the guidance for the next budget to continue working toward the TAA designed capability. The point to keep in mind is that the judgements about the FY 84 force were incorporated into the Army Plan providing guidance for the 1986-90 time frame.

The discussion thus far has glossed over some of the details in the period from the time when the Omnibus is completed until the Army Logistic Assessment is made. This period includes 90 days for the LEA/AMC analysis and 30-60 days for the ALA process. All of this must be considered as part of the cycle which must be completed prior to the development of guidance for the future budget years.

The concern which became apparent in many of the interviews is the utility of that information based upon timeliness required for budget decisions. The feeling encountered most often was

that of "ok, this is where we are now, so what?" This attitude might develop as a result of having already made decisions during the preparation of the budget estimate that could have been influenced by the information which was not available at the time the decision was made. Thus, the utility of this assessment would appear to be greatest as a means of verifying that we did or did not achieve the capability we programmed into the budget for a particular year.

This verification could also provide a means of validating the assumptions which were made in the original projection. Establishing an audit trail between a particular year in the PFBES outyear and validation when that year is actually executed would enable determination of the impact of budget decisions during execution as well as provide a data base for reporting back to Congress on our efficiency in achieving what we set out to accomplish in a macro sense.

AUTOMATION

The second major area of concern deals with the automation of the Omnibus methodology. In its current configuration it is an amalgamation of manual and automated processes. The concern is that a greater degree of automation is needed in order to cut down the length of time needed to complete an assessment.

A significant portion of the process is automated now. Two of the largest data bases, The Army Equipment Distribution Plan(TAEDP) and the force structure, are available in readily transferable formats. Also, the models used by CAA are highly automated. An area which appears to offer significant potential for improvement is the postprocessing of outputs that is performed by LEA/AMC. A specific example is that of assessing the availability of repair parts to support the force. The present methodology involves numerous major subordinate commands of AMC each running individual programs and exchanging information to complete its assessment.¹ The exchange involves physical exchange of computer tapes which must be manipulated to adapt to the individual programs. Greater speed could be obtained by facilitating a computer exchange through a media such as the Commodity Command Standardized System(CCSS) which is used by all of the major subordinate commands.

The example above is only one area that was readily apparent. Numerous other areas are being worked by many dedicated professionals with respect to the interfaces between the data bases.

To prevent the wrong impression being created another aspect of the automation must be addressed here. The amount of data to be processed is tremendous. Omnibus also must compete for time on the same computer which is used to accomplish TAA and many

1. Interview with Sundman, Carol, MRS., Office of the Deputy Chief of Staff for Readiness, Headquarters, Army Materiel Command, Alexandria, Va, 15 April 1986

other computer programs. Scheduling is a major difficulty which is constantly being addressed by CAA. Improvement in this problem could undoubtedly be achieved by more or better computers, however, that subject will not be addressed in this paper.

The point must also be emphasized that the efforts of CAA to improve the capability of Omnibus are ongoing. The use of FORCEM with its modeling of logistic functions in the combat simulation will eliminate some of the need for the postprocessing done in the past. It is unclear whether this model will speed up the process or not due to the fact that it is still being tested.

CHAPTER V

DISCUSSION

OMNIBUS/PPBES_RELATIONSHIP

There have been numerous previous statements concerning the need to know the current capability in order to make decisions about a future capability. The temptation to provide examples is great. Instead, one point must be made. If our capabilities exceed our requirements, and the requirements don't change because of our assessment of our adversary, then we achieve the freedom to direct our resources elsewhere. In our world today, we have not achieved such a state, nor are we likely to, because our adversaries are dynamic entities which would not feel comfortable with us achieving such a state. For this reason, we must be continually assessing ourselves and our adversaries.

Omnibus gives us that capability to know where we are as of a particular point in time. The identification of current

capability would highlight those areas where shortfalls existed when compared to the programmed capability. That knowledge is intended to be used as a baseline assessment from which planners and programmers can provide guidance. That guidance can then be incorporated into the Army Plan. If sufficiently important, the outcomes of that guidance are incorporated into the Program Objective Memorandum (POM). The impact can be near or far term.

Once in the POM, the issue must survive a number of reviews in order to remain in the Budget Estimate. The issue may then be incorporated in the DOD and the President's Budget. The final two steps occur after justification to, and authorization by, the Congress. The money must be authorized and appropriated. This brings us to the point where execution of the current budget begins.

The time frame for the actions presented is a total of two years before execution begins. So, it is possible that any issue identified in the Omnibus/ALA process will not be influenced by application of resources for a minimum of two years hence, unless assets may be manipulated within existing authorizations.

Another avenue does exist whereby an earlier influence might occur. If the Omnibus outcome indicates a change of relative priorities is needed among existing issues, then action could occur by intervention of the appropriate decision-makers upon the budget estimate which is being prepared as the results become available. This is possible because the Army Plan is being prepared at the same time the budget estimate is being prepared

for the program year (figure 3 provides the approximate time frames). The likelihood of this occurring is very small due to the long time frame needed for Omnibus.

PPBES IN CURRENT YEAR (CY 1985)

BUDGET YEAR (FY 1986)

BUDGET JUSTIFICATION
& BUDGET EXECUTION

| PRES BUDGET | AUTHORIZATION APPROPRIATION | APPORTIONMENT APPROPRIATION WARRANT | BUDGET EXECUTION |
|-------------|-----------------------------|-------------------------------------|------------------|
| | | | |

PROGRAM YEAR (FY 1987-91)

PROGRAMMING &
BUDGET FORMULATION

| | | | | | | |
|----|---------|------|-------------|-----|-----------------|-----|
| DG | SVC POM | JPAH | ISSUE BOOKS | PDM | BUDGET ESTIMATE | PBD |
| | | | | | | |

PLANNING YEAR (FY 1988-92)

PLANNING &
PROGRAMMING

| | | | | |
|--------------|--------|------|------------|----------------------------|
| NSSD NSDD | JSPDSA | JSPD | CDRS' CONF | DRAFT DG* AND ARMY PLAN |
| | | | | |

| | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|

*BEGINNING WITH THE PLANNING FOR POM 88-92,
THE JSPD AND DG WILL BE BIENNIAL DOCUMENTS.

figure 3-2

2 ARMY COMMAND AND MANAGEMENT: THEORY AND PRACTICE, 1985-1986, US Army War College, figure 15-3, page 5-6

A recent decision by the DCSOFS/DCSLOG staff agencies to expand the Omnibus process to a two year cycle may negate the possibility of earlier impacts upon the budgeting process. The determining factor will be the usefulness and viability of the results obtained from the FORCEM model. Those results will be available at approximately the same time frame as in the past. If those results are usable without a lot of post-processing, they could provide a potential for mid-analysis utility. It will be necessary to await the outcome of the current tests to get an answer.

The two year cycle of Omnibus is intended to take advantage of the two year budget cycle and provide CAA some opportunities not available in the past. The time schedule being tested will provide results from a primary analysis at the 12 month point. These results will be provided to LEA/AMC for their post-processing analysis. At the same time, CAA is planning to adjust planning factors and assumptions to make additional runs of the same scenario and determine the impact of those changes. This timing will provide initial results at the time preparation of the next budget estimate is being accomplished. It would appear that the results would also be available for use in justification of that estimate. The critical factor in this scheduling is the assumption that the two year budget cycle will evolve into a cycle where the first year is used to prepare the budget estimate and the second year is budget justification and approval. If the Congress requires an earlier start of the justification process,

this advantage will be lost.

One final area of concern with the utility of the Omnibus process to the PFBES has to do with the force which is studied. There is a valid need for determining a current force capability. The shortcoming with the process results mainly from the fact that the results cannot be obtained in a timely enough fashion to allow influence on near term actions. This means that action to correct deficiencies in other than Operations, Maintenance Accounts and Military Pay Accounts cannot be effected until the next budget cycle (meaning 3-4 years when we go to the two year budget cycle). The Assistant DCSLOG, MG Russo suggests that the best use of Omnibus in the near term may be to influence the equipment distribution as it becomes available.³

The reason for the lack of impact on a near-term basis is the long lead time for production items. Thus, decisions about more cargo trucks versus petroleum haulers must be made prior to the budget preparation. Presently, these decisions are made as objectively as possible without the aid of a decision tool such as Omnibus. Omnibus currently only assists the army staff efforts for optimization by providing a limited validation of whether or not past decisions were good.

Use of Omnibus in a predictive manner, by studying the program year force (using the two year cycle, this would mean studying the 1992 force in 1988) would provide sufficient time

³ Interview with Russo, Vincent, MG, US Office of the Deputy Chief of Staff, Logistics, Army, Washington, 23 April 1986

to change assumptions, evaluate synergistic effects of different combat service support structures, and determine possible outcomes of different decisions. Use of Omnibus in this manner would enable more objective arguments in budget justification sessions before Congress and contribute to optimization of the application of limited resources.

There are risks inherent in the use of a computer simulation for decision-making in such a political arena. Obviously, if Congress requires changes to the force which was studied, the effects of those changes will not be known. Similarly, if the threat changes significantly, many assumptions and planning factors may be invalidated. However, the availability of some possible outcomes before the decisions are made on long lead procurements may be well worth the risk.

If the study of the program year force were made in addition to the current year, establishment of an audit trail on force changes would enable validation of planning factors, assumptions, and decisions.

Naturally, there would be many problems associated with addition of another simulation of this magnitude. Projection of the force structure and the wholesale support base would be difficult. Additionally, another data base would need to be created to maintain the audit trail for force structure changes and other decisions which would affect the outcome. These problems may be well beyond the current capabilities of the agencies involved. This point will be further discussed in the

following paragraphs.

AUTOMATION

One of the most significant problems with Omnibus is the volume of data to be handled by a large number of agencies. The research in this area indicated that there is much activity throughout each of the agencies in addressing solutions to many associated problems. Much of this activity is related to data manipulation. The one area which holds great potential for improvement is the area of automated linkages.

The present process uses transfer of data through automated means in many cases. However, there is involved physical transfer of tapes which may or may not require reformatting of data on the tapes. Development of automated retrieval between numerous data bases involving extraction of only pertinent data offers the possibility for much more rapid processing. Linkages through standard army systems such as Viable and CCSS appear to provide one avenue toward such a solution.

LEA has some significant developments ongoing in terms of logistics modeling which might influence some aspects of the Omnibus process. Most of the activities would pertain to specific portions of the process. An example is the possibility that LOGNET could provide a vehicle to update wholesale stock

status in a responsive manner. Other opportunities may develop as these programs are built.

Another agency which had ongoing activity related to the Omnibus is the Logistics Center. A consciousness existed in the staff section responsible for the Army Model Improvement Program(AMIP) toward enhancement of the current situation. Again, there were no specific projects oriented on Omnibus. However, some of the model development showed potential for spinoff enhancements.

DOCUMENTATION

During the research it quickly became apparent that the amount of documentation concerning the Omnibus process was very limited. In fact, the only unclassified description of the process with the level of detail presented in this paper is contained in the Omnibus final report that is classified SECRET. As a result, the description in this paper represents a compilation of information from many sources, most of which were interviews with action officers. This lack of documentation causes a situation where knowledge of the process is limited by the amount of individual involvement of the action officer. In many cases, this is limited to the detailed instructions in a tasking letter directing their efforts for input to a system from

which they receive little or no feedback.

Discussions with LTC M. Sivigny, Chief, ALA Center, DDCSLOG, revealed that the level of concern regarding a knowledge base of the Omnibus and ALA process was such that he is currently developing a set of instructions for members of the ALA panels to ensure a common understanding of the two processes and their interface.⁴

The reasons for including this discussion in the paper are twofold. First, as the knowledge of the process and its outputs is increased, the greater is the likelihood that the outputs will be used as intended, and in some ways which may not have been envisioned. A general impression received during the research period was that a high degree of knowledge of Omnibus existed at the General Officer Steering Committee level and among members of the Program Development Increment Packages(PDIPs) panels, however, relatively little beyond that. Second, as the level of knowledge increases at the action officer level there is more personal involvement which may ultimately lead to enhancements generated by those who deal with the system the most.

4 Interview with Sivigny, Michael, LTC, US Office of the Deputy Chief of Staff, Logistics, Army, Washington, 23 April 1986

CHAPTER VI

CONCLUSIONS AND RECOMMENDATIONS

CONCLUSIONS

A common theme in most of the interviews with action officers who use the outputs indicated that the Omnibus process does provide the product it was designed to provide, an assessment of the current capability of the US Army.

The utility of that assessment to the Army Staff was not evaluated due to my predisposition that the Omnibus process is valuable enough to study and attempt to enhance. Discussions with action officers did indicate that the results are reviewed and used by panel members in prioritizing Program Development Increment Packages (PDIPs).

Documentation of the Omnibus process is inadequate in terms of non-technical, unclassified literature which discusses concepts, approaches, and agency involvement. The specific type

of documentation to inform participants of their role in the total process is not readily available. The research for this paper did not address technical documentation such as programming manuals at CAA or LEA because that was outside the intended scope of this effort.

Insufficient facts were found to provide a basis for a judgement concerning an additional run of Omnibus for the program year.

The effect of the two year cycle and the ability to influence the budget estimate preparation will not be known until the completion of the test currently ongoing.

The internal developmental efforts of CAA involving FORCEM are the only efforts with a direct impact on the current Omnibus process. There are related efforts which have potential spinoff benefits that cannot be clearly specified at this time. The agencies involved with those projects are also involved with Omnibus so that possible benefits are likely to be recognized.

This research revealed no heretofore unknown sources of automation enhancements to the Omnibus process. It did confirm the existence of areas where considerable improvement in responsiveness can be obtained through implementation of improvements known to the personnel involved in the process.

RECOMMENDATIONS

A concerted effort is needed to increase knowledge of the Omnibus process through education of staff agencies and action officers. Encouragement of publications in professional magazines of the various staff agencies outlining the process and discussing means for improvement is vital to obtaining individual involvement. Individual involvement on a wide scale is necessary if we are to realize the potential of obtaining improvements from the decentralized developmental efforts throughout the Army.

As improvements are made and the length of the process is shortened, an analysis of the program year force should be made. Whether this should be accomplished through an additional run of Omnibus, or changing the focus of the effort will need to be determined by the available resources. The optimal solution would be to make two runs, the first being the program year, and the second, modified by the decisions that were made concerning the program year force, as a validation of the decisions and a current capability assessment.

A central agency, such as the Assistant Chief of Staff, Information Management, should host an annual conference of all agencies involved in the development of computer models and systems. The purpose of the conference should be to compare all

ongoing developmental efforts for duplication, similarity, and interface. Attendees should be provided with detailed descriptions of all agency efforts at both management level and technician level. A key goal of such a conference should be to establish a discipline for manipulation of data which would enable relatively easy exchange of information.

A concerted effort is needed to establish automated linkages of data bases through standard army systems such as Viable, CCSS, and LOGNET. Elimination of the physical transfer of data offers a lucrative area for enhancement of responsiveness.

BIBLIOGRAPHY

1. Army War College, ARMY COMMAND AND MANAGEMENT: Theory and Practice, 1985-1986.
2. US General Accounting Office, Report to the Chairman, House, Committee on Armed Services, Measuring Military Capability, February 1986.
3. Bigelow, James H., Conceptual Design for an Army Logistics Assessment--Extended(ALA-X) Methodology, A Rand Note sponsored by the Department of the Army under Contract No. MDA903-84-C-0137, July 1985.
4. Wells, Michael C., MAJ. Total Army Analysis(TAA) Force Design Process, Concepts Analysis Agency Technical Paper, June 1984, (CAA-TF-84-7).
5. Bothwell, William. US Army Logistics Evaluation Agency. Personal Interview. New Cumberland Army Depot: 13 December 1985.
6. Setcavage, Paul, MAJ. US Army Logistics Evaluation Agency. Personal Interview. New Cumberland Army Depot: 13 December 1985.
7. Marshall, Gran, LTC. US Army Logistics Evaluation Agency. Personal Interview. New Cumberland Army Depot: 13 December 1985.
8. Robicki, Michael. US Army Logistics Evaluation Agency. Personal Interview. New Cumberland Army Depot: 13 December 1985.
9. Fenimore, David, MAJ. Office of the Director, Operations, Readiness, and Mobilization, Deputy Chief of Staff, Operations, Department of the Army. Personal Interviews. Washington: 17 December 1985, 9 April 1986, 23 April 1986.
10. Sivigny, Michael, LTC. Office of the Deputy Chief of Staff, Logistics. Personal Interviews Washington: 18 December 1986, 9 April 1986, 23 April 1986.
11. Feeney, Donald. Office of the Director, Plans and Operations, Deputy Chief of Staff, Logistics. Personal

Interviews. Washington: 18 December 1985, 9 April 1986, 23 April 1986.

12. Campi, Frank, LTC. US Army Concepts Analysis Agency. Personal Interviews. Rockville, Md: 13 January 1986, 18 February 1986.

13. Whitley, Howard. US Army Concepts Analysis Agency. Telephone Interview. 10 January 1986.

14. Miller, Tom. Operations Analysis Directorate, US Army Logistics Center. Personal Interview. Ft Lee, Virginia: 28 January 1986.

15. Neeley, Robert. Operations Analysis Directorate, US Army Logistics Center. Personal Interview. Ft Lee, Virginia: 28 January 1986.

16. Burwood, Richard, MAJ. Operations Analysis Directorate, US Army Logistics Center. Personal Interview. Ft Lee, Virginia: 28 January 1986.

17. Daugherty, Richard, LTC. Operations Analysis Directorate, US Army Logistics Center. Personal Interview. Ft Lee, Virginia: 29 January 1986.

18. Parris, Gary, LTC. Operations Analysis Directorate, US Army Logistics Center. Personal Interview. Ft Lee, Virginia: 29 January 1986.

19. Fisch, Charles. Operations Analysis Directorate, US Army Logistics Center. Personal Interview. Ft Lee, Virginia: 29 January 1986.

20. Gill, Claire, COL. Program Analysis and Evaluation Directorate, Office of the Comptroller of the Army. Telephone Interview. 7 April 1986.

21. Hatch, Ted, LTC. Office of the Deputy Chief of Staff, Logistics, Project Forecast. Personal Interview. Washington: 9 April 1986.

22. Block, David, MAJ. Office of the Deputy Chief of Staff, Personnel. Personal Interview. Washington: 9 April 1986.

23. Wiseth, Robert. Office of the Deputy Chief of Staff, Personnel. Personal Interview. Washington: 9 April 1986.

24. Sundman, Carol. Office of the Deputy Chief of Staff, Readiness, Headquarters, Army Materiel Command. Personal Interview. Alexandria, Virginia: 15 April 1986.

25. US Department of the Army. Army Regulation 5-11: Army Model Improvement Program. Washington: 15 July 1981.
26. US Department of the Army. Army Regulation 700-5: Total Logistic Readiness/Sustainability(TLR/S) Analysis. Washington: 16 December 1985.
27. US Department of the Army. Chief_of_Staff_Regulation_15-32: Army Operational Readiness Analysis Steering Committee. Washington: 23 March 1979.
28. Setcavage, Paul C., MAJ. Logistics Readiness Rating Report. Unclassified Briefing. Presentation Date and Place unknown(Paper copy provided 13 December 1985).
29. US Army Logistics Evaluation Agency. Prologue-Planning Resources_of_Logistics_Units_Evaluator. Unclassified Briefing. Presentation Date and Place Unknown(Paper copy provided 13 December 1985).
30. US Army Logistics Evaluation Agency. LOGNET. Unclassified Briefing. Presentation Date and Place Unknown(Paper copy provided 13 December 1985).
31. US Army Logistics Evaluation Agency. TLR/S Abbreviated Methodology. Unclassified Briefing. Presentation Date and Place Unknown(Paper copy provided 13 December 1985).
32. US Concepts Analysis Agency. FORCEM. Unclassified Briefing. Presentation Date and Place Unknown(Paper copy provided 29 January 1986).
33. US Concepts Analysis Agency. INCORPORATION_OF_CSS_INTO FORCEM. Unclassified Briefing(Paper copy provided 29 January 1986).

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